

Table 2.1
Stormwater Discharge System Configurations and Dimensions for the Bridge Alternatives

Storm Water Alternative	Bridge Lane Alternative	No. Catch Basins or Vaults per Bridge Section ¹	Discharge Pipe Configuration		Dimensions of Containment Lagoon per Pontoon Section (feet)				Lagoon Depth & Volume
			No. Discharge Pipes from each Pontoon	Assumed Pipe Spacing (ft) ²	Length	Width	Draft (Depth) ³	Volume (ft ³)	
I. Pontoons with Catch Basins	4	6	3	180	360	3.1	12	13,591	Minimum
		6	3	180	360	3.1	17	19,254	Average
		6	3	180	360	3.1	22	24,916	Maximum
	6	8	4	120	360	6.1	12	26,460	Minimum
		8	4	120	360	6.1	17	37,485	Average
		8	4	120	360	6.1	22	48,510	Maximum
	8	14	7	60	360	18.1	12	78,300	Minimum
		14	7	60	360	18.1	17	110,925	Average
		14	7	60	360	18.1	22	143,550	Maximum
II. Pontoons with Vault System	4	2	1	420	360	3.1	12	13,591	Minimum
		2	1	420	360	3.1	17	19,254	Average
		2	1	420	360	3.1	22	24,916	Maximum
	6	2	1	420	360	6.1	12	26,460	Minimum
		2	1	420	360	6.1	17	37,485	Average
		2	1	420	360	6.1	22	48,510	Maximum
	8	2	1	420	360	18.1	12	78,300	Minimum
		2	1	420	360	18.1	17	110,925	Average
		2	1	420	360	18.1	22	143,550	Maximum

Note:

¹ Each floating bridge section consists of two main pontoons (with road sections above) in parallel, with a containment lagoon between and cross-pontoons at each ends.

² Spacings between stormwater drainage pipes are based on catch basin spacings developed by WSDOT engineers for the various lane alternatives (Engineering Drawings from Preliminary Drainage Layout, SR 520-Lake Washington Floating Bridge, Sheet 1).

³ The pontoon draft (depth below surface) will vary from 12 feet (minimum) in the middle to 22 feet at the ends of the bridge, based on information from WSDOT engineers.